Engaging with Academia and Research Institutions (ARIs) to support Family Farmers and Food System Transformation During and Post COVID-19 Pandemic in Asia

With technical assistance from the FAO Regional Office for Asia and the Pacific
Insights into supporting Vietnamese family farmers’ cooperative and food system transformation through sustainable forest product-based enterprise approach and diversity

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I. CONTEXT

The government defines Vietnam as an agricultural country. In the context of the COVID-19 pandemic, the agricultural sector has contributed to socio-political stability and played the role of a "safety belt" for the entire economy in times of crisis; help stabilize consumer prices; help offer alternative jobs and generate export revenue. Even so, 89% of households are smallholder farmers, the average size of a smallholder is 0.32 hectares. And, small farms are often rendered less efficient by the fragmented nature of their landholdings.

In the North of Vietnam where most of the poorest ethnic minorities living, monoculture cultivation without protection measures has led to soil degradation, reducing crop yields and increasing investment costs in crop production. For instance, small family farms spend almost 40 percent of their value of production for agricultural inputs.

Moreover, the area of land use for the majority of households is narrowed due to the natural population increase, the deforestation to expand the cultivation area is increasingly and it leads to strongly impact to local living environment.
• **Most farmers have not received training in production**, but only practice production according to the experience of generations in their families. Therefore, access to agro-ecology and improvement of farming methods to suit production practices in the context of climate change is limited.

• There are gaps in training rural human resources including training content and training methods; the connection and harmonization of policies; the application and replication of initiatives in the fields of agriculture, forestry, and a big gap in the capacity of agricultural cooperatives from an early stage to mature stage and stand firm.

• With the support of the Forest and Farm Facility (FFF)- FAO and the Vietnam Farmers' Union; partners from agriculture colleges , agricultural universities as well as research institutes. The farmers were self-aware of their situation. Then, together, they promote the community's internal resources and connect with external resources to develop production and business based on 5 groups of sustainable factors.
Viet Nam cinnamon and star anise cooperative- a model of FFF

- Viet Nam cinnamon and star anise cooperative in Dao Thinh commune, Tran Yen district, Yen Bai province is one of some models that has gradually overcome difficulties and is now widely recognised for its remarkable achievements.

- An approach for establishing sustainable forest product-based enterprise has strengthened the resilience of local farmers through a structured process of market analysis and development built initially around the cinnamon value chain. They have then started to diversify products and add value to products within their core value chain. They have also started to diversify into additional and alternative value chains with organic farming to gain further resilience.
The process of cooperative development can be systematized into 7 key steps as follows:

**Step 1**
Recognizing benefits of cooperation in the face of increasing external risks

**Step 2**
Community engagement

**Step 3**
Identification of production vision and SWOT analysis, leading to the formation of producer groups, then an inter-collective group, and then finally a cooperative

**Step 4**
Business incubation to build staff capability within business organisations

**Step 5**
Production and business planning in core value chains

**Step 6**
Diversification into new value chains and markets

**Step 7**
Implementation of further production pilots, evaluation, lesson learned and replication
Before 2015
- 4 small farmer groups growing cinnamon (3-11hh/per group)
- Sold raw cinnamon products (leaves, bark, branches, wood) to middlemen with low prices, depending on traders; lack market information, technology, policy information; Bad roads to the forest.
- Endure climate change risks. Don’t know how to solve these problems.

2015- 2016 (With the companion of FFF)
- Facilitating, connect to build initial trust.
- Forming 4 official cinnamon growing groups.
- By 2016, these four groups had decided to associate >> an inter-collective group with 39 members, 135ha cinnamon

2017-2019
- The Viet Nam Cinnamon & Star Anise Cooperative was established (23 members) with co-investment from the VN Samex exporting company, a private investor which later became a member of the cooperative.
- Contribution from inter-members & a considerable loan from the banks, 3.5 million USD factory construction commenced (Annual output 1,500-2,000 tons/year include cinnamon & star anise)

2020 until now
- 1,000 ha of organic cinnamon
- 20,000m² of forest and farm land converted to cinnamon factory areas.
- Diversifying products from cinnamon (19 kinds of products). Exports to more than 15 countries. Revenues 2 millions USD in 2020.
- Diversification into other value chains such as honey, mulberry for silk, medicinal plants etc
- Creates more a lot of jobs
- Increase 15-30% income

Stages of The Viet Nam Cinnamon & Star Anise Cooperative development
The main climate change, epandemic risks

Increasing average annual temperature; The change of the average annual rainfall >> to sudden crop production changes; pests hatch earlier, grow stronger and generate pests and diseases.

In Yen Bai province, damage from extreme weather events has been increasing while a lot of experience passed from generation to generation is not enough to use under current conditions.
The survey team of France, the UK, and Japan conducted a reality check from the process of planting, caring, harvesting and processing cinnamon products of Vietnam anise cinnamon cooperative 2019.
• Their cinnamon and anise processing plant covers an area of 16,000 m² and is equipped with modern machinery, with a capacity of about 2000 tons/year.
• In 2020, the processing capacity is up to 3000 tons/year, therefore, the cooperative is continuing to invest in a second factory in the commune to expand production.
• Currently, the cooperative produces 12 products from cinnamon, of which 10 products are certified organic by Japan, the UK and Europe.
• At the same time, the cooperative is applying the PGS internal quality and production management system. organic production.
• Employee's income is from 6.5 million VND to 7 million VND/person/month.
• Create jobs for 60 to 150 employees, of which 50% are female.
• The cooperative has now invested about 40 billion VND (1.7 million USD) to build small motels to serve guests coming to work at the establishment and to serve community tourism.

Revenue from the main product of the cooperative in the past 3 years (2018-2020)
II. SOLUTION

LESSONS LEARNED FROM THE INITIATIVE CAN CONTRIBUTE TO SUPPORTING RURAL TRANSFORMATION, INTEGRATING AGRONOMY AND FAMILY FARMER ORGANIZATIONS
1. DIVERSITY

- Cooperatives, farmers
  - Diversification of social networks
  - Diversification of business products

- Physical infrastructure/technology
  - Improve agricultural skills
  - Infrastructure development

- Organizational infrastructure
  - Cooperative groups
  - Establishing cooperative groups

- Agroforestry, diversification of products under the forest canopy

- Main product chain development
  - Diversification of product chains

- Building linkages with cooperative groups, cooperatives, 500 associated farmers

- Building relationships with the community, Government, programs, partners

- Invest in and upgrade machinery and technology
Diversity Biodiversity
Product diversification

The practice of **organic farming** brings practical benefits:

- Restore the forest ecosystem, while increasing the thickness of the soil layers.
- Increases the number of soil organisms, along with increasing the ability to store carbon in the soil (reducing greenhouse gases).
- Increases soil and water holding capacity
- Increase the number of livelihood options such as growing mulberry, raising silkworms, beekeeping, herbs, fruit trees, tea, bamboo shoots... to diversify products under the forest canopy, enhance biodiversity and ecosystems
2. An approach for establishing sustainable forest product-based enterprises has strengthened the resilience of local farmers through a structured process of market analysis and development built initially around the cinnamon value chain.

- **Market analysis and development (MA&D):**
  MA&D is a framework for planning support to tree and forest product-based enterprises. Training on the basis of 5 groups of sustainable factors closely following the market chain.

- **In MA&D the ‘screening the five areas of enterprise development’ method** is designed to ensure the sustainability of the enterprise by considering five types of factors which influence the success of an enterprise.
MA&D map (FFF-FAO)

The four MA&D phase
Farmer group/ cooperative think like potential entrepreneurs, and they should think of solutions to the following worst-case scenarios based on 5 groups of sustainable factors:

<table>
<thead>
<tr>
<th>No.</th>
<th>5 groups of sustainable factors</th>
<th>Scenarios</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Market/economy, including financial aspects</td>
<td>• Slowdown in the national/global economy</td>
<td>Farmers need to recognize the problem and unite voluntarily to solve their problems together.</td>
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<td></td>
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<td>• Prices drop</td>
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<td>• Buyers cancel orders</td>
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<td>• The truck transporting products has an accident</td>
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<td>• A sample in the shipment is found to be contaminate</td>
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<td>• The fund for paying collectors are stolen</td>
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<td>2</td>
<td>Natural resource management/environment</td>
<td>• Collectors do not respect harvesting rules</td>
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<td>• Outsiders continue illegal harvesting</td>
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<td>• Weather is unpredictable</td>
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<td>3</td>
<td>Social/cultural</td>
<td>• Conflict occur among forest users</td>
<td>Think together based on gathered information and supporting from facilitators.</td>
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<td>• Poorest individuals cannot access commercialized products</td>
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<td>4</td>
<td>Institutional/legal</td>
<td>• Changes in the legislation restrict access to land or resources</td>
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<td>• Some policies are available but difficult to access</td>
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<tr>
<td>5</td>
<td>Technology, product research and development</td>
<td>• Machine or equipment breaks down</td>
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<td></td>
<td></td>
<td>• The technique used causes the loss or damage of many products</td>
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3. Access to product certifications needs to be flexible- PGS certification is a typical example

It's important to make sure it's real, to do it right, and to help farmers adhere to good agricultural practices.

• The cooperative has access to PGS certification - a Participatory Guarantee System for organic products.

• This PGS certification of Vietnam has been recognized by IFOAM and has been applied in Vietnam for more than 10 years, however, this certificate has not been recognized fully by the government but is encouraged to use.

• However, due to a good monitoring and cross-checking system, the PGS system has been of great help in assisting farmers in complying with practices according to international certifications. Second, PGS certification with costs is suitable for small-scale farmers and suitable with local market, so farmers will have better access.
4. Methods of capacity building

From the training needs of farmers, their capacity needs to be enhanced with a learner-centered approach; learning through the experiential circle and focusing on older learners with different ethnic backgrounds.

- Technical training to pay attention to use farmer field school (FFS) methodology and peer to peer learning
- At the follow up stage, there needs to be an organization representing farmers strong enough to connect the cooperation of the parties.
- Trained core farmers become farmer trainers and they instruct other farmers.
- Coaching activities- follow-up are very important in capacity building method: Farmers are given the opportunity to carry out their production and business activities and they have trainers to coach them; motivate/facilitate them to discuss their own problems and find solutions to their problems.
- In the context of the covid-19 epidemic, online training follows the group tutoring method. And so, the training process for groups/cooperatives and market connection is not broken
THANKYOU VERY MUCH